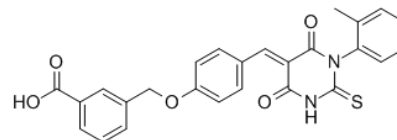


**Product Name** : LTV-1  
**Cat. No.** : PC-45510  
**CAS No.** : 347379-29-7  
**Molecular Formula** : C<sub>26</sub>H<sub>20</sub>N<sub>2</sub>O<sub>5</sub>S  
**Molecular Weight** : 472.5124  
**Target** : Protein Phosphatase/PTP  
**Solubility** : 10 mM in DMSO



## Biological Activity

LTV-1 is a highly potent, cell-permeable and reversible **LYP (lymphoid tyrosine phosphatase)** inhibitor with IC<sub>50</sub> of 508 nM.

LTV-1 shows 3-fold selectivity over TCPTP (IC<sub>50</sub>=1.52 μM) and PTP1B (IC<sub>50</sub>=1.59 μM), 46-fold over SHP1 (IC<sub>50</sub>=23.2 μM), and 59-fold over CD45 (IC<sub>50</sub>=30.1 μM), > 200-fold over PTP-PEST (IC<sub>50</sub> >100 μM).

LTV-1 increases the phosphorylation levels of the direct physiological targets of LYP, augments calcium mobilization, activates the proximal IL-2 promoter, and enhances the expression of the early activation marker CD25 in T cells.

## References

Vang T, et al. *Nat Chem Biol*. 2012 Mar 18;8(5):437-46.

**Caution: Product has not been fully validated for medical applications. Lab Use Only!**

E-mail: tech@probechem.com